Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Original)** A method for processing a request from a host to write a database record to a target location on a logical device associated with a data-storage system in data communication with the host, the method comprising:

maintaining, at the data storage system, information identifying extents of the logical device that are designated for storage of database records; and

on the basis of the information, determining whether the target location is one on which a database record is permitted to be stored.

2. **(Original)** The method of claim **1**, wherein maintaining information identifying extents comprises maintaining an extent table having extent table entries identifying properties associated with the extent.

3. **(Original)** The method of claim **2**, further comprising selecting the properties to include information identifying a set of data verification steps to be carried out when data is written into the extent.

4. **(Original)** The method of claim **1**, further comprising identifying the logical device to be a logical device on which database records are to be written.

5. **(Original)** The method of claim **1**, further comprising identifying a set of data verification steps to be carried out in connection with writing data to an extent.

6. **(Original)** The method of claim **5**, further comprising carrying out the data verification steps.

7. **(Original)** The method of claim **1**, wherein determining whether the target location is one on which a database record is permitted to be stored comprises determining that the target location is contained completely within an extent.

8. **(Original)** The method of claim **3**, wherein determining whether the target location is one on which a database record is permitted to be stored comprises determining that the target location is contained completely within one or more extents, all of which share the same data verification steps.

9. **(Original)** A method of processing an I/O request to access a storage device having a plurality of extents defined thereon, each of the extents having a corresponding set of processing instructions associated therewith, the method comprising:

receiving an I/O request having an associated target location on the storage device;

identifying an extent set associated with the target location, the extent set having at least one extent;

determining that the processing instructions associated with all of the extents within the extent set can be executed;

executing the I/O transaction; and

executing processing instructions consistent with the extent set associated with the target location.

10. **(Original)** The method of claim **9**, wherein receiving an I/O request comprises receiving a write request.

11. **(Original)** The method of claim **10**, further comprising selecting the processing instructions to be instructions for verifying that the writing of the data to the target location was carried out successfully.

12. **(Original)** The method of claim **9**, wherein determining that the processing instructions associated with all of the extents within the extent set can be executed comprises determining that none of the extents associated with the target location overlap with each other.

13. **(Original)** The method of claim **9**, wherein determining that the processing instructions associated with all of the extents within the extent set can be executed comprises determining that the target location includes overlapping extents, and that the processing instructions associated with the overlapping extents are compatible.

14. **(Original)** A data-storage system comprising:

a logical device having a plurality of extents defined thereon, each of the extents having a corresponding set of processing instructions associated therewith; and

information identifying each extent on the logical device and the processing instructions associated with that extent.

15. **(Original)** The system of claim **14**, wherein the information identifying each extent comprises an extent table having an extent table entry corresponding to an extent on the logical device.

16. **(Original)** A computer-readable medium having encoded thereon software for processing a request from a host to write a database record to a target location on a logical device associated with a data-storage system in data communication with

the host, the software comprising instructions that, when executed, cause a computer to:

maintain, at the data storage system, information identifying extents of the logical device that are designated for storage of database records; and

on the basis of the information, determine whether the target location is one on which a database record is permitted to be stored.

17. **(Original)** A computer-readable medium having encoded thereon software for processing an I/O request to access a storage device having a plurality of extents defined thereon, each of the extents having a corresponding set of processing instructions associated therewith, the software including instructions that, when executed, cause a computer to:

receive an I/O request having an associated target location on the storage device;

identify an extent set associated with the target location, the extent set having at least one extent;

determine that the processing instructions associated with all of the extents within the extent set can be executed;

executing the I/O transaction; and

execute processing instructions consistent with the extent set associated with the target location.